

REMARKS

Reconsideration of this application is requested. Claims 14-16 are amended and claims 18-20 are added while claim 17 has been cancelled. No new matter has been added to claims 14-16 and 18-20.

Election

Counsel confirms the election of Figures 8-9 and claims 14-17. The remaining claims (1-13) are withdrawn as directed to non-elected subject matter.

Claim Rejections - 35 USC 112, ¶2:

Claim 17 has been cancelled. Accordingly, the rejection based on 35 USC 112 is moot.

Claim Rejections - 35 USC 102:

Considering the Examiner's rejection of claims 14-17 under 35 U.S.C. 102(b) and 102(e), it is to be noted that that amended claim 14 of the present application includes the limitations featuring the fact that the ropesizer produces a high viscosity confectionary including a first high viscosity raw material and a second high viscosity raw material wrapped by the first high viscosity raw material. Also, the ropesizer includes a sheet forming unit for elongating the first high viscosity raw material into a sheet shape, a delivering unit which applies the second high viscosity raw material onto the first raw material, and a wrapping means for wrapping the sheet shape first raw material so as to wrap the second high viscosity raw material in the first high viscosity raw material.

The ropesizer of present invention has been developed to solve problems associated with conventional techniques. That is, as described in the specification of the present invention, in the conventional process of producing high viscosity confectionary, such as soft candies, a batch type production process is used -- a continuous production process is not employed since it is difficult to sufficiently carry out a mixing process and continuously convey the resultant mixture using a continuous production process.

However, as described in the specification of the present invention, if the batch type

production process is employed, processes for production control becomes complicated, and this is one of the factors which reduces the productivity in a batch process.

Although attempts have been made and experiments have been conducted to prepare a product using a single axial or twin axial extruder as described in the specification of the present invention, an acceptable kneaded material could not be obtained due to such factors as heat generated during a kneading process. That is, in the above-mentioned kneading device, the amount of air incorporated into the mixture becomes insufficient due to the heat generated, and as a result, a mixture having desired characteristics as soft candy including superior softness when initially chewed and resistance to adhering to the teeth cannot be obtained.

Also, as described in applicants' specification, if a method is employed in which an extruder having a duplex nozzle is used, problems arise, for instance, fats and oils contained in the raw material generate oil stains since high pressure is applied thereto. Moreover, the structure of the raw material which includes a large number of fine air bubbles in it is broken by the applied pressure and the soft texture of the high viscosity confectionary characteristic to the present invention will be lost.

The present invention has been achieved to solve the above-mentioned problems associated with the conventional techniques. As will be explained in detail below, there has been no ropesizer which is the same as the present invention. Also, although each of the components of the present invention may be known, it is not obvious to a person having ordinary skill in the art to combine the components in the required configuration to achieve the present invention since the prior art teachings do not suggest to one of ordinary skill in the art to make the claimed substitution or other modification. Accordingly, the present invention as defined in applicants' claims is patentable.

JP '887 is not the same as the present invention because, for example, it includes an extruder indicated by the numeral 1 as shown in FIGS. 1 and 3. The present invention does not use an extruder – in fact, an extruder is to be avoided. As explained above, if an extruder is used, fats and oils contained in the raw material generate oil stains since high

pressure is applied thereto. For this reason, JP '887 can produce only a crunch candy the outer surface of which is covered by a candy sheet. Also, according to the device of JP'887, it is not easy to control the amount of the candy sheet supplied, and hence to maintain the ratio of cream center to the candy sheet in the final product. Accordingly, the candy sheet produced by the device of JP '887 may be broken if conveyed for a long distance and it is not suitable for a continuous production of acceptable products.

Pentzlin (US 2,960,045) discloses a method of making a shaped dough product which is different from the high viscosity confectionary of the present invention.

Chambers et al (US 4,275,647) discloses an apparatus for producing a tubular centerfilled food product having a rigid, friable baked outer shell and a core of edible filling material, which again is different from the high viscosity confectionary of the present invention.

Tashiro (US 5,290,577) discloses a method of continuously depositing fillings on a sheet of bread dough and winding up the sheet with the deposited fillings from one of its sides into a bar of bread dough. This is different from the high viscosity confectionary produced by the device of the present invention.

Askman et al (US 5,660,102) discloses an apparatus for forming cannelloni, which is different from the high viscosity confectionary of the present invention.

Kobayashi (US 6,001,403) discloses an apparatus in which a bar-shaped inner food material (1) pushed out by an extruder (B) provided with a screw pump (p) and a vane pump (v) is described in section 3, lines 1-14 of the specification. As explained above, if an extruder is used, problems of oil stains and destruction of an air-inclusion structure are caused and the characteristics of the present invention cannot be obtained.

Unlike any of the references discussed above, in the ropesizer of the present invention, the ratio of the two kinds of the raw materials may be accurately controlled, and a high viscosity confectionary having a two-layer structure which produces a superior texture when chewed due to the presence of a large amount of air in the structure can be obtained. That is, according to the invention claimed in claim 14, the first raw material is

elongated into a shape by a sheet forming unit while a minimum stress is applied thereto, and a certain amount of the second raw material is supplied onto the first material using a delivering unit while placing or exerting substantially no pressure to the second raw material which drops due to the weight thereof into a strand form by the controlling roller 61. In this manner, an intermediate product of the high viscosity confectionary having desired characteristics is obtained.

Claim Rejections - 35 USC 103:

Claims 15 and 17 stand rejected under 35 U.S.C. 103 (a) as being unpatentable over Knebl (US 4,949,630) and one of Tashiro, Askman et al, Chambers et al, Pentzlin, and Kobayashi. This is not a correct conclusion, although applicants do note that the elongation unit of the present invention may have a structure similar to that disclosed in Knebl.

For the reasons explained above for each of the previously discussed and applied references (i.e., Tashiro, Askman et al, Chambers et al, Pentzlin, and Kobayashi), it was not obvious at the time the invention was made to a person having ordinary skill in the art to combine the information of these references to arrive at the present invention. That is, according to the present invention, a high viscosity confectionary composed of two kinds of high viscosity raw materials in a two-layer arrangement or product is obtained while preventing the generation of oil stains and the destruction of the fine-air structure of the desired product. For this reason, a product having superior characteristics as a soft candy including softness when initially chewed and resistance to adhering to the teeth can be obtained.

Nor do combinations of the cited references, as the above-mentioned problems cannot be solved and a product having such superior characteristics cannot be obtained.

In determining whether a *prima facie* case of obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification. The prior art must provide the motivation to change to its own teachings to arrive at the invention

under rejection. It is not sufficient that the prior art could be so modified; instead the prior art must teach or suggest that the prior art should be so modified.

In addition, it is well-established law that the motivation to modify the teachings of a reference or to combine references must come from the references themselves, and cannot be derived from the teachings of the application under examination. Accordingly, it is clear that the invention claimed in claims 15 and 16 is not obvious from the disclosures of the applied references.

Considering the Examiner's rejection of claims 15 and 17 under 35 U.S.C. §103 (a) as being unpatentable over Ruffinatti (US 4,648,316), JP 1-128750 and one of Tashiro, Askman et al, Chambers et al, Pentzlin, and Kobayashi, applicants acknowledge that the delivering unit of the present invention may have a structure similar to that disclosed in JP 1-128750.

Applicants have already addressed Tashiro, Askman et al, Chambers et al, Pentzlin, and Kobayashi, and for these reasons it is not obvious at the time the invention was made to a person having ordinary skill in the art to combine these reference to make the present invention. That is, as explained above, according to the present invention, a high viscosity confectionary including two kinds of high viscosity raw materials in a two-layer configuration is obtained while preventing the generation of oil stains and the destruction of a fine-air structure. The product of the present invention has superior characteristics as a soft candy including softness when initially chewed and resistance to adhering to the teeth.

The cited references cannot be reasonably combined to resolve problems recognized in this art – without resorting to applicants' disclosure.

Accordingly, it is clear that the present invention claimed in claims 15 and 16 is not obvious from the disclosures of the references.

In view of the distinctions discussed above, withdrawal of the rejections directed to claims 14-16 is respectfully requested. Applicants submit that claims 14-16, and 18-20

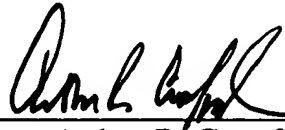
KIMURA et al
Serial No. 09/913,460
July 9, 2003

recite subject matter that is clearly patentable. Therefore, Applicants submit that the application is now in condition for allowance with claims 14-16, 18-20 contained therein. Reconsideration and withdrawal of the rejections are requested. Allowance of claims 14-16, and 18-20 at an early date is solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____



Arthur R. Crawford
Reg. No. 25,327

ARC:eaw
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100